

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented): An apparatus for session control in a wireless communication network, comprising:
 - means for detecting requested application-specific packets in a packet stream;
 - means for blocking application-specific packets in the packet stream that are not the requested application-specific packets; and
 - means for activating, in response to the means for detecting the requested applicationspecific packets, a plurality of packet sessions with application-specific QoS parameters, without requiring explicit cooperation of application software.
2. (Previously presented): The apparatus of claim 1 further comprising means for deactivating at least one of the plurality of packet sessions.
3. (Currently Amended): The apparatus of claim 1 [~~or 2~~] wherein the wireless communication network comprises a UMTS radio access network.
4. (Previously presented): The apparatus of claim 1, wherein the packet sessions comprise Packet Data Protocol (PDP) contexts.

5. (Previously presented): The apparatus of claim 1 wherein the means for detecting comprises stateful inspection means, and the apparatus further comprises session manager means and packet filter means responsive to the stateful inspection means.

6. (Previously presented): The apparatus of claim 1, wherein the means for detecting is arranged to inspect uplink packet flows to detect application-specific packet flows, via application-specific control messages.

7. (Previously presented): The apparatus of claim 1, wherein the means for detecting is arranged to inspect downlink packet flows to detect application-specific packet flows, via application-specific control messages.

8. (Previously presented): The apparatus of claim 1, wherein the packet sessions comprise conversational class PDP contexts.

9. (Previously presented): The apparatus of claim 8, wherein the conversational class PDP contexts are arranged to carry Voice over IP (VOIP) traffic.

10. (Previously presented): The arrangement apparatus of claim 8, wherein the conversational class PDP contexts are arranged to carry Video over IP traffic.

11. (Currently Amended): The apparatus of claim 9 [~~or 10~~] wherein the traffic is based on originated calls controlled by Session Initiation Protocol (SIP).

12. (Currently Amended): The apparatus of claim 9 [~~or 10~~] wherein the traffic is based on originated calls controlled by H.323 protocol.

13. (Previously presented): The apparatus of claim 1, wherein the packet sessions comprise streaming class PDP contexts.

14. (Previously presented): The apparatus of claim 13, wherein the streaming class PDP contexts are arranged to carry streaming media traffic controlled by Real Time Streaming Protocol.

15. (Previously presented): The apparatus of claim 1, wherein the packet sessions comprise interactive class PDP contexts.

16. (Previously presented): The apparatus of claim 1, wherein the packet sessions comprise background class PDP contexts.

17. (Previously presented): The apparatus of claim 16, wherein the background class PDP contexts are arranged to carry Post Office Protocol-Version 3 (POP3) traffic.

18. (Previously presented): The apparatus of claim 16, wherein the background class PDP contexts are arranged to carry Simple Mail Transfer Protocol (SMTP) traffic.

19. (Previously presented): A method for session control in a wireless communication network, comprising:

detecting requested application-specific packets in a packet stream;

blocking application-specific packets in the packet stream that are not the requested application-specific packets; and

activating, in response to detecting the requested application-specific packets, a plurality of packet sessions with application-specific QoS parameters, without requiring explicit cooperation of application software.

20. (Original): The method of claim 19 further comprising deactivating at least one of the plurality of packet sessions.

21. (Currently Amended): The method of claim 19 [~~or 20~~] wherein the wireless communication network comprises a UMTS radio access network.

22. (Previously presented): The method of claim 19, wherein the packet sessions comprise Packet Data Protocol (PDP) contexts.

23. (Previously presented): The method of claim 19, wherein detecting comprises detecting in a stateful inspector, and the method further comprises providing a session manager and a packet filter responsive to the stateful inspection means.

24. (Previously presented): The method of claim 19, wherein detecting comprises inspecting uplink packet flows to detect application-specific packet flows, via application-specific control messages.

25. (Previously presented): The method of claim 19, wherein detecting comprises inspecting downlink packet flows to detect application-specific packet flows, via application-specific control messages.

26. (Previously presented): The method of claim 19, wherein the packet sessions comprise conversational class PDP contexts.

27. (Original): The method of claim 26, wherein the conversational class PDP contexts carry Voice over IP (VOIP) traffic.

28. (Original): The method of claim 26, wherein the conversational class PDP contexts carry Video over IP traffic.

29. (Currently Amended): The method of claim 27 [~~or 28~~] wherein the traffic is based on originated calls controlled by Session Initiation Protocol (SIP).

30. (Currently Amended): The method of claim 27 [~~or 28~~] wherein the traffic is based on originated calls controlled by H.323 protocol.

31. (Previously presented): The method of claim 19, wherein the packet sessions comprise streaming class PDP contexts.

32. (Original): The method of claim 31, wherein the streaming class PDP contexts carry streaming media traffic controlled by Real Time Streaming Protocol.

33. (Previously presented): The method of claim 19, wherein the packet sessions comprise interactive class PDP contexts.

34. (Previously presented): The method of claim 19, wherein the packet sessions comprise background class PDP contexts.

35. (Original): The method of claim 34, wherein the background class PDP contexts carry Post Office Protocol-Version 3 (POP3) traffic.

36. (Original): The method of claim 34, wherein the background class PDP contexts carry Simple Mail Transfer Protocol (SMTP) traffic.

37. (Previously presented): The method of claim 19, wherein the method is performed in User equipment (UE).

38. (Currently Amended): User equipment (UE) for use in a UTRA system, the user equipment comprising the apparatus of claim 1 [any one of claims 1-2, 4-10, or 13-18].

39. (Currently Amended): An integrated circuit comprising the apparatus of claim 1 [~~any one of claims 1-2, 4-10, or 13-18~~].

40. (Currently Amended): A computer program element ~~comprising~~ [computer] having stored therein program code [~~means~~] for session control in a wireless communication network, the program code serving to: [~~method of any one of claims 19-20, 22-28, or 31-37~~]

detect requested application-specific packets in a packet stream;
block application-specific packets in the packet stream that are not the requested
application-specific packets; and
activate, in response to detecting the requested application-specific packets, a
plurality of packet sessions with application-specific QoS parameters, without requiring
explicit cooperation of application software.

41. (Previously presented): The apparatus of claim 5, wherein detecting in a stateful inspector comprises inspecting packets, implying a state of an application-specific packet session via control packets and allowing packets for said session to flow through the firewall if said session originated from inside the firewall or otherwise, blocking said session otherwise.

42. (Previously presented): The method of claim 23, wherein detecting in a stateful inspector comprises inspecting packets, implying a state of an application-specific packet session via control packets and allowing packets for said session to flow through the firewall if said session originated from inside the firewall or otherwise, blocking said session otherwise.

43. (Previously presented): The apparatus of claim 2, wherein the packet sessions comprise Packet Data Protocol (PDP) contexts.

44. (Previously presented): The apparatus of claim 3, wherein the packet sessions comprise Packet Data Protocol (PDP) contexts.

45. (Previously presented): The apparatus of claim 2, wherein the means for detecting comprises stateful inspection means, and the apparatus further comprises session manager means and packet filter means responsive to the stateful inspection means.

46. (Previously presented): The apparatus of claim 3, wherein the means for detecting comprises stateful inspection means, and the apparatus further comprises session manager means and packet filter means responsive to the stateful inspection means.

47. (Previously presented): The apparatus of claim 4, wherein the means for detecting comprises stateful inspection means, and the apparatus further comprises session manager means and packet filter means responsive to the stateful inspection means.

48. (Previously presented): The apparatus of claim 5, wherein the means for detecting is arranged to inspect uplink packet flows to detect application-specific packet flows, via application-specific control messages.

49. (Previously presented): The apparatus of claim 5, wherein the means for detecting is arranged to inspect downlink packet flows to detect application-specific packet flows, via application-specific control messages.

50. (Previously presented): The apparatus of claim 2, wherein the packet sessions comprise conversational class PDP contexts.

51. (Previously presented): The apparatus of claim 4, wherein the packet sessions comprise conversational class PDP contexts.

52. (Previously presented): The apparatus of claim 2, wherein the packet sessions comprise streaming class PDP contexts.

53. (Previously presented): The apparatus of claim 4, wherein the packet sessions comprise streaming class PDP contexts.

54. (Previously presented): The apparatus of claim 2, wherein the packet sessions comprise interactive class PDP contexts.

55. (Previously presented): The apparatus of claim 4, wherein the packet sessions comprise interactive class PDP contexts.

56. (Previously presented): The apparatus of claim 2, wherein the packet sessions comprise background class PDP contexts.

57. (Previously presented): The apparatus of claim 4, wherein the packet sessions comprise background class PDP contexts.

58. (Previously presented): The method of claim 20, wherein the packet sessions comprise Packet Data Protocol (PDP) contexts.

59. (Previously presented): The method of claim 23, wherein detecting comprises inspecting uplink packet flows to detect application-specific packet flows, via application specific control messages.

60. (Previously presented): The method of claim 23, wherein detecting comprises inspecting downlink packet flows to detect application-specific packet flows, via application specific control messages.

61. (Previously presented): The method of claim 20, wherein the packet sessions comprise conversational class PDP contexts.

62. (Previously presented): The method of claim 22, wherein the packet sessions comprise conversational class PDP contexts.

63. (Previously presented): The method of claim 20, wherein the packet sessions comprise streaming class PDP contexts.

64. (Previously presented): The method of claim 22, wherein the packet sessions comprise streaming class PDP contexts.

65. (Previously presented): The method of claim 20, wherein the packet sessions comprise interactive class PDP contexts

66. (Previously presented): The method of claim 22, wherein the packet sessions comprise interactive class PDP contexts.

67. (Previously presented): The method of claim 20, wherein the packet sessions comprise background class PDP contexts.

68. (Previously presented): The method of claim 22, wherein the packet sessions comprise background class PDP contexts.

69. (Previously presented): The method of claim 20, wherein the method is performed in User equipment (UE).

70. (Previously presented): The method of claim 21, wherein the method is performed in User equipment (UE).

71. (Previously presented): The method of claim 22, wherein the method is performed in User equipment (UE).

72. (Previously presented): The method of claim 23, wherein the method is performed in User equipment (UE).

73. (Previously presented): The method of claim 24, wherein the method is performed in User equipment (UE).

74. (Previously presented): The method of claim 25, wherein the method is performed in User equipment (UE).